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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/414,082	10/06/1999	KENNETH M. BUCKLAND	062891..340	2772

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EXAMINER

PHILPOTT, JUSTIN M

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/414,082

Applicant(s)

BUCKLAND ET AL.09414082

Examiner

Justin M Philpott

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-9, 11-17 and 19-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4, 13, 21, 22, 30, 31, 36, 37, 42 and 43 is/are allowed.
- 6) ☒ Claim(s) 2, 3, 5-9, 11, 12, 14-17, 19, 20, 23-29, 32-35, 38-41 and 44-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 3, 6, 12, 14, 20, 23, 27-29 and 48 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 2, 3, 5, 6, 8, 19, 20, 22, 23, 25 and 48 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,512,740 to Baniewicz.

Regarding claims 3, 5, 6, 20, 22, 23 and 48, Baniewicz teaches a method in a TDM network (e.g., FIGS. 3, 8, 17, and 40) having a plurality of switchable paths (e.g., paths 76, 78 and 80 in FIG. 17) to a common destination (e.g., destination 48) wherein the method comprises: receiving TDM traffic from a traffic source (e.g., origin 42) as a plurality of copies of traffic routed along a plurality of predetermined paths (e.g., 76 and the combination of 78 and 82) originating at the traffic source, each one of the paths having a receive circuit (e.g., inherently within each of 44 and 46); configuring a TDM switch (e.g., tandem node 46 comprises cross-connect switch, see col. 4, lines 1-3) to

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provide a route to a common destination (e.g., destination 48) for each one of the paths; determining a qualified copy of the traffic (e.g., see col. 7, line 20 – col. 8, line 61 regarding neighboring nodes exchanging messages between themselves); and discarding all copies of the traffic except for the qualified copy such that only the qualified copy is passed to the TDM switch for routing to a common destination (e.g., see col. 24, lines 22-26 wherein the highest quality link is selected, and copies of traffic on other links are inherently discarding in view of their not being selected), wherein determining comprises detecting loss of a keep-alive signal at one of the respective receive circuits (e.g., see col. 7, line 20 – col. 8, line 20 regarding exchanging keep alive signals and see col. 21, lines 44-48 regarding detecting loss of keep alive signals).

Further, regarding claims 5 and 22, Baniewicz teaches accompanying traffic with kill-bits (e.g., X-bits, see col. 8, lines 35-60) to indicate whether the traffic should be switched through or discarded.

Further, regarding claims 6 and 23, Baniewicz teaches communicating information related to qualifying between the respective receive circuits by means of path verification messaging (e.g., see col. 7, lines 60-61).

Regarding claims 2 and 19, the determining of Baniewicz comprises receiving management traffic on a path indicating degradation or loss of signal on the path (e.g., see col. 7, lines 59-61 regarding signal fail message). Further, Baniewicz teaches an Alarm Indication Signal which indicates degradation or loss of signal on the path (e.g., see col. 9, line 50 – col. 10, line 48 regarding Alarm Indication Signal AIS).

Regarding claims 8 and 25, Baniewicz teaches TDM traffic is carried in STS-1 formats within a transmission signal (e.g., see col. 4, lines 1-17).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9, 11, 12, 14, 16, 17, 26-29, 33, 35, 39, 41, 45 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baniewicz in view of applicant's admitted prior art.

Regarding claims 12, 14 and 28, Baniewicz teaches the method discussed above regarding claims 3, 5, 6, 20, 22, 23 and 48, and further, teaches memories are provided within nodes by disclosing that port listings are stored in each node (e.g., see col. 17, lines 52-61); regarding claims 27 and 29, Baniewicz teaches receiving traffic associated with a path, determining if the TDM traffic is pass-through based on the path, and if the TDM traffic is not pass-through, set an accompanying kill-bit (e.g., removing path verification message comprising X-bit) if the receive circuit is stand-by for the particular path (e.g., see col. 8, line 35 – col. 9, line 25); and regarding claims 9, 17, 26, 33, 35, 39, 41, 45 and 47, Baniewicz teaches the TDM switch (e.g., cross-connect switch 1633SX) is configured to route TDM traffic from each respective receive circuit (e.g., within nodes 44, 46) to the common destination (e.g., destination 48, see FIG. 17). Baniewicz, however, may not specifically disclose the additional limitations recited in the above claims such as specific memory stores designated traffic and path links are VTs.

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However, regarding all of these additional limitations recited in claims 9, 12, 14, 17, 26-29, 33, 35, 39, 41, 45 and 47, these claims were rejected in the previous office action by the Examiner taking official notice that all of the additional limitations recited in these claims are well known in the art. In Applicant's response to the previous office action, Applicant has not traversed the Examiner's assertion of official notice or Applicant's traverse is not adequate. Therefore, in accordance with MPEP 2144.03(C), all of these additional limitations recited in these claims comprise well-known art and are hereafter taken to be admitted prior art.

Regarding claim 11, as discussed above regarding claims 2 and 19, the determining of Baniewicz comprises receiving management traffic on a path indicating degradation or loss of signal on the path (e.g., see col. 7, lines 59-61 regarding signal fail message). Further, Baniewicz teaches an Alarm Indication Signal which indicates degradation or loss of signal on the path (e.g., see col. 9, line 50 – col. 10, line 48 regarding Alarm Indication Signal AIS).

Regarding claim 16, as discussed above regarding claims 8 and 25, Baniewicz teaches TDM traffic is carried in STS-1 formats within a transmission signal (e.g., see col. 4, lines 1-17).

6. Claims 7, 24, 32 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baniewicz in view of U.S. Patent No. 5,903,371 to Arecco et al.

Regarding claims 7, 24, 32 and 44, Baniewicz teaches the method discussed above regarding claims 6 and 23 and further teaches the signals are SONET (e.g., see

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FIG. 30), however, Baniewicz may not specifically disclose a configuration around SONET UPSR.

However, Arecco teaches a method for SONET comprising a network (e.g., see FIG. 1) having a first path (5-8) in a first direction (13) around a SONET UPSR and a second path (9-12) in a second direction (14) around the SONET UPSR, which provides an optical self-healing-ring communication network. The teachings of Arecco provide a super-network which is self-healing in case of failure (e.g., see col. 12, lines 30-34).

Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the SONET teachings of Arecco to the SONET method of Baniewicz in order to provide a super-network which is self-healing in case of failure (e.g., see col. 12, lines 30-34).

7. Claims 15, 34, 38, 40 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baniewicz in view of applicant's admitted prior art, further in view of Arecco.

Regarding claims 15, 34, 38, 40 and 46, Baniewicz in view of applicant's admitted prior art teach the method discussed above regarding claims 14 and 27-29, and further teach the signals are SONET (e.g., see FIG. 30), however, Baniewicz in view of applicant's admitted prior art may not specifically disclose a configuration around SONET UPSR.

However, Arecco teaches a method for SONET comprising a network (e.g., see FIG. 1) having a first path (5-8) in a first direction (13) around a SONET UPSR and a second path (9-12) in a second direction (14) around the SONET UPSR, which provides

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an optical self-healing-ring communication network. The teachings of Arecco provide a super-network which is self-healing in case of failure (e.g., see col. 12, lines 30-34).

Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the SONET teachings of Arecco to the SONET method of Baniewicz in view of applicant's admitted prior art order to provide a super-network which is self-healing in case of failure (e.g., see col. 12, lines 30-34).

Allowable Subject Matter

8. Claims 4, 13, 21, 22, 30, 31, 36, 37, 42 and 43 are allowed.

9. The following is an examiner's statement of reasons for allowance: claims 4, 13 and 21 recite determining a qualified copy of TDM traffic in a particular network wherein the determining is based upon particular specific criteria, wherein such limitations were not found in a search of related prior art. Claims 22, 30, 31, 36, 37, 42 and 43 depend upon one of claims 4, 13 and 21 and are therefore also allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M Philpott whose telephone number is 571.272.3162. The examiner can normally be reached on M-F, 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on 571.272.3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Justin M Philpott



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